DOCUMENT RESUME

ED 225 452 HE 015 805

AUTHOR Carnahan, Robert E.
TITLE Faculty Attitudes of Alienation Related to Specific Professional and Environmental Characteristics in Higher Education: Collective Bargaining as a Consequence of These Attitudes and Characteristics.
PUB DATE [82]
NOTE 44p.
PUB TYPE Reports - Research/Technical (143)

EDRS PRICE MF01/PC02 Plus Postage.
DESCRIPTORS *Collective Bargaining; *College Faculty; Employment Practices; *Faculty College Relationship; Higher Education; *Individual Power; Personnel Policy; Power Structure; Professional Autonomy; *Teacher Alienation; Teacher Attitudes; *Teaching Conditions; Work Attitudes; Work Environment

ABSTRACT

The relationship between the current collective bargaining movement in higher education and faculty alienation was studied by determining whether professional and work conditions were related to alienation and whether faculty alienation affected opinions concerning collective bargaining. Of 401 mailed questionnaires, 187 usable responses were obtained from faculty members at a Pittsburgh area university that did not have a bargaining agent. Faculty alienation was measured by five indices (powerlessness, isolation, meaninglessness, normlessness, and self-estrangement). Results indicate that certain professional and environmental characteristics were associated with different types of alienation. The younger, untenured, lower ranking, social science and humanities, and lower income faculty members scored higher on certain alienation indices. Faculty members who were the most alienated were more likely to favor collective bargaining as a means of resolving conflicts than their less alienated colleagues. Faculty favoring collective bargaining in higher education scored higher on all of the alienation indices. It is concluded that faculty members showing more confusion (normlessness) over institutional procedure were more likely to view collective bargaining as a means of clarifying this confusion. It is also suggested that faculty who felt more isolated from society at large were more in favor of collective bargaining. A bibliography is appended. (SW)

****
* Reproductions supplied by EDRS are the best that can be made *
* from the original document. *
****

U.S. DEPARTMENT OF EDUCATION
NATIONAL INSTITUTE OF EDUCATION
EDUCATIONAL RESOURCES INFORMATION CENTER (ERIC)
THE document has been reproduced as received from the person or organization originating it.
Minor changes have been made to improve reproduction quality.
• Points of view or opinions stated in this document do not necessarily represent official NIE position or policy

Robert E. Carnahan, Ph.D.
Assistant Professor or Sociology
The Pennsylvania State University
(New Kensington Campus)

"PERMISSION TO REPRODUCE THIS MATERIAL HAS BEEN GRANTED BY
Robert E. Carnahan
TO THE EDUCATIONAL RESOURCES INFORMATION CENTER (ERIC)."

ED225452

Faculty Attitudes of Alienation Related to Specific Professional and Environmental Characteristics in Higher Education: Collective Bargaining as a Consequence of These Attitudes and Characteristics

Introduction

The basic contention of the following research is that the environmental and professional conditions prevalent in the higher education melieu during the late 1960's and the decade of the 1970's are associated with the development of a faculty attitude constellation best defined as alienation. These factors, environmental and professional pressures plus alienation, were in turn, the major contributing concerns associated with the development collective bargaining and unionization in higher education. It would seem that the traditional collegial arrangements designed to structure faculty-administration relationships were inadequate to meet the new environmental and professional pressures during this time frame.

Collective bargaining emerged as the process several faculties in higher education have chosen as a means to address these problems. Conflict resolution by collective bargaining was nonexistent in higher education prior to 1965-66 when the Merchant Marine Academy at King's Point, New York became the first four-year college to opt for collective bargaining (Pettibon, 1973). It was not until 1975, five years after the National Labor Relations Board extended the right of collective bargaining to employees at private colleges and universities, that faculties in mass numbers began to accept collective bargaining (Angell, 1981). Coser (1964)

contends that conflict can be functional as well as dysfunctional for social systems. It is the contention of the following research that collective bargaining has been the means used by faculties in higher education to help them deal with these environmental and professional pressures, especially in those states which have passed the enabling legislation. In this way they believe that their problems will be redressed. Conflict theory will serve as the basic framework within which the study will be conducted (Coser, 1956).

Several authors have delineated the specific environmental and professional pressures in higher education during the 1970's including: Duryea, et. al., 1973; Carr and Van Eyck, 1973; Garbarino, 1975; Ladd and Lipset, 1975 and Angell, 1981. W. G. Pettibon (1973) summarized these problems as follows:

A. The uneven effect of the research boom in the 1950's and 1960's which favored the senior faculty of the more prestigious universities at the expense of the faculty at junior colleges and smaller schools generally.

B. The rapid growth of the state educational systems which brought into being new and often confusing relations of authority on the campus.

C. The changeover of teachers' colleges into liberal arts colleges in state systems which brought new professionally oriented faculty into conflict with old line administrations.

D. Reduction of funds available both for research grants and for administrative purposes.

E. The greater scrutiny of state legislatures and the public generally which had led to limitations on what had to be regarded as the traditional preogatives of faculty.

F. The insecurity created by the potential loss of the tenure systems.

G. The oversupply of Ph.D.'s with its particular effect on employment conditions of junior faculty and particularly women (pp. 16 and 17).

Birnbaum (1980) contends that the decade of the 1980's will bring further environmental pressures that may contribute to the unionization process in higher education.

> There is good reason to believe that over the next decade changes in the environment of higher education will increase on many campuses the forces leading to or intensifying disruptive conflict. In public institutions, declining enrollments, reduced levels of budget support and increasing demands for accountability may create a competitive climate in which defensiveness and concern for personal security erode levels of trust, openness and commitment to the purposes of the academic enterprise.
>
> (Preface, p. XIV)

Several researchers have attempted to operationalize the specific environmental and professional variables that the previous literature suggested were associated with the collective bargaining movement in higher education (e.g., Lane, 1967; Haehn, 1969; Moore, 1971; Opdahl,

1971; Lozier, 1973 and Ladd and Lipset, 1975).* A brief summary of the findings of these studies indicates that specific environmental and professional characteristics are indeed associated with faculty opinion on collective bargaining. Faculty persons who favor collective bargaining were more likely to be younger; lower in academic rank; untenured; lower in salary; more skeptical of traditional grievance procedures; from the humanities and social sciences and previously employed as high school teachers. Thus, the association between opinion (favoring or opposing) collective bargaining and selected independent variables (environmental and professional characteristics) has been firmly established by research.

These findings serve as a basic beginning point in the following research. One of the fundamental purposes of the following work is to determine if these environmental and professional characteristics might contribute to a general condition of faculty alienation. In other words, do faculty persons who lack tenure, are lower in rank, have lower salaries, etc., also manifest higher degrees of alienation?

A second major purpose of this research is to determine if there is an association between the degree of faculty alienation and whether a faculty person favors or opposes collective bargaining. The basic assumption is that the greater the degree of alienation a faculty person manifests, the more likely they are to favor collective bargaining.

*Citations for Lane, Haehn, Moore, Opdahl and Lozier are from Anatomy of Collective Bargaining Election in Pennsylvania's State Journal of Colleges by G. G. Lozier and K. P. Mortimer.

The concept of alienation is consistent with the conflict model of social relationships (Coser, 1956). The basic problem when dealing with a concept like alienation is that it has so many connotations. Ivan Meszaros, for example, suggests that alienation in its original form means being separated from God by having "fallen from Grace" (Meszaros, 1970, p. 20).

The first philosopher of note to address himself to the question of alienation was Hegel. Hegel uses the term alienation to "... refer to a separation or discordant relation, such as might be obtained between the individual and the social substance, or (as self-alienation) between one's actual condition and essential nature" (Schacht, 1970, p. 35). Hegel also gives alienation a second meaning in which man attempts to overcome this separation by "... a surrender or sacrifice of particularity and willfulness, in connection with the overcoming of the alienation, and the retainment of unity" (Schacht, 1970, p. 35).

It is from Hegel that Marx constructed his conceptualization of alienation. Marx's definition is more denotative than Hegel's. According to Marx, man is estranged from: his labor, himself in relation to his labor and his inner being and finally, man is estranged from his fellow man (Schacht, 1970, p. 35).

Marx originates the idea that work and alienation are intimately linked. The worker has feelings of powerlessness and estrangement in relation to his work. This is one of the key themes in the current research.

In the intervening years since Marx, alienation has proven to be a multifaceted and ubiquitous concept. It has been used by religious philosphers (Macquarrie, 1973; Tillich, 1944; Jones, 1963) by political scientists (Laing, 1967; Schwartz, 1973; Hause and Mason, 1975) by economists (Weisskoph, 1971; Gailbraith, 1967) by sociologists (Zeitlin, 1966; Zurcher, et. al., 1972) and several other authors in their respective disciplines to explain the origin of problems in their fields of study.

Recent attempts to be more definative concerning the concept and process of alienation date from the publication of "On the Meaning of Alienation" by Melvin Seeman (1959). In this pivotal article Seeman synthesized the various conceptualizations of alienation from the works of preceding authors. The conceptualizations of alienation as summarized by Seeman include: powerlessness, meaninglessness, normlessness, isolation and estrangement. In this current research, Seeman's conceptical synthesis of alienation serves as a theoretical framework for operationalizing alienation.

Several sociologists have attempted to operationalize these components of alienation. Powerlessness was a basic concern in the works of Clark (1959), Dean (1961), Pearlin (1962), Aiken and Hage (1966), Seeman and Neal (1964), Middelton (1963) and Neal and Rettig (1963).

Several authors have also attempted to operationalize meaninglessness as a dimension of alienation (e.g., Kenniston, 1960; Middelton, 1963; Nisbet, 1953; Bolton, 1972; etc.).

The third major conceptualization set forth by Seeman is that alienation derives from a condition of normlessness. This concept originates

with Durkheim (1951) who used the term "anomie" to describe a social condition of confusion concerning norms in society. Several researchers in sociology have operationalized this concept (e.g., Srole, 1956; McDill and Ridley, 1962; Bullough, 1967; Etzioni, 1962; Simpson, 1970; Fishen, 1973 and Form, 1975).

Isolation was the basis of several sociological studies including: Gould, 1969; Hajda, 1961: Fisher, 1973: Ransford, 1968 and Kornhauser, 1959).

Estrangement (from self and society) was the basis of such diverse studies as Hammond, 1965 and Gaff and Wilson, 1971.

Two primary questions emerged from the search of literature. The first question concerns the extent to which environmental and professional characteristics are associated with alienation. Ladd and Lipset's (1975) study serves as the methodological underpinning for this first question.

The second question that emerged from the literature search concerns the extent to which faculty opinions toward collective bargaining (favoring vs. opposing) are associated with attitudes of alienation Seeman's synthesis and clarification of the various alienation conceptualizations serves as the methodological underpinning for this second research question.

Definitions

Collective bargaining is the process by which management and union representatives reach decisions on the terms of a contract specifying the conditions under which labor is to work (Urdang, 1968, p. 264). It was the contention of Donald Wollett that... "Collective bargaining in higher education may be necessitated by the fact that administrations, governing

boards, legislatures and governors seem indifferent, if not hostile, to faculties that lack political muscle" (Duryea and Fisk, et. al., 1973, p. 43).

Alienation is defined as a composite of five distinct attitudinal states, summarized by Seeman (1959) as follows:

Powerlessness; "... the expectancy or probability held by the individual that his behavior cannot determine the occurrence of the outcomes, or reinforcements he seeks" (Seeman, 1959, p. 784).

Meaninglessness; "... when the individual is unclear as to what he ought to believe -- when the individual's minimal standards for clarity in decision making are not met" (Seeman, 1959, p. 786).

Normlessness; "... anomie (normlessness) denotes a situation in which the social norms regulating individual conduct have broken down or are no longer effective as rules of behavior" (Seeman, 1959, p. 786).

Isolation; "The alienated in the isolated sense are those who, like the intellectual assign low reward value to goals that are typically highly valued in a given society" (Seeman, 1959, p. 788-789).

Self-Estrangement; "By alienation is meant a mode of experience in which the individual experiences himself as an alien (from others also). He has become, one might say, estranged from himself (and others)* (Seeman, 1959, p. 789).

An Attitude is a "positive or negative reaction toward a denotable abstract or concrete object or proposition. Attitudes possess three central characteristics: they always have an object; they are usually evaluative; and they are considered to be relatively enduring" (Bruvold and Wrightsman, 1972, p. 285).

*Parentheses added by author.

Method

Operationalization

It was necessary to develop a new questionnaire designed to answer the two basic research questions. Question one was operationalized on the face-sheet. Items in this section were patterned after the Ladd and Lipset (1975) format combining personal and professional characteristics with the basic question concerning whether the faculty person favored or opposed collective bargaining.

Question two was operationalized by designing a five dimensional index of alienation based on Seeman's (1959) conceptualizations. Each dimension or concept of alienation was designed as a separate attitude scale (e.g., powerlessness, meaninglessness, etc.). These separate scales were composed of six questions each and each question provided Likert responses. The responses for each item were assigned values from 1 to 5 (strongly agree-to-strongly disagree). Since there were six questions per scale, the highest possible score on each scale was 30 (most alienated) and the lowest score was 5 (least alienated). Thus, the attitude scale designed for this research was a Likert type or summated rating scale.*

Pilot Studies - Reliability and Validity

Two pilot studies were conducted in order to determine the reliability of the alienation indices. The questionnaire for the first pilot consisted of four specific questions for each conceptual dimension of alienation. Two potential problems were encountered in this first pilot

*See Kaplan's (1964) procedure for mixing ordinal variables and interval variables for statistical treatment.

related to a possible response-set bias — 1) the scale items were grouped together in conceptual categories and 2) all items were stated negatively. In the second pilot the questions were randomized and half of the items were stated positively while the other half were seated negatively. Further, two questions per index were added bringing the total number of questions per index to six. The overall reliability of the indices for both pilots was 0.80, using Kerlinger's (1973, p. 448) formula for reliability. Individual reliability scores for each index were: normlessness, 0.88; meaninglessness, .82; estrangement, 0.79; powerlessness, .78 and isolation, .73.

The validity of the instrument was checked by judges, who were asked to evaluate each item by comparing it to Seeman's original definition of the concept.

The Sample

The sample consisted of the faculty at a selected university in the Pittsburgh area. A total of 401 questionnaires were mailed. Of this total, 24 persons were no longer at the university; 8 persons declined to answer because they were part-time faculty; 2 persons were retired and 1 person stated that he was not governed by the university but by the Army. Deleting these non-respondents from the total, a potential population of 366 faculty persons remain. The combined number of respondents from the original mailing and a follow-up was 188 or 51.4%. Only 3 of the respondent's questionnaires were unusable.

The university in this study was chosen for the following reasons:

1. Its accessibility for mailing, remailing and telephone follow-ups.

2. Its lack of a bargaining agent. The presence of a bargaining agent might have biased respondents to be more favorable toward collective bargaining.
3. The representativeness of its faculty and curriculum. It is a university with several different schools which services both graduate and undergraduate students.
4. The manageable size of the faculty. Due to a limitation of funding a larger sample was not feasible.

Statistical Techniques

The statistical techniques used to answer question 1 concerning the association between personal and professional characteristics and score on the alienation indices were analysis of variance where there were multiple dimensions of the independent variables and t-tests where there was only one dimension of the independent variable to consider. Scores on the individual alienation indices were the dependent variables, while the independent variables in question 1 were the personal and professional characteristics specified by Ladd and Lipset (1975). The alienation mean scores for each dimension of the independent variable were compared to ascertain if they were from the same or a different universe. The significance level for accepting or not accepting each null hypothesis was the 5% level.

Measurement of Faculty Attitudes

Faculty alienation (attitude) was measured by five separate indices in the questionnaire (powerlessness, meaninglessness, normlessness, isolation and self-estrangement). All of the questions within each index

were designed to measure alienation specific to the work situation. The exception to this was the isolation index. Because of its definition, it could not be applied specifically to the work situation. It explains isolation (alienation) from society — not work.

Statistical Technique

The statistical technique used to answer question 2 concerning the association between scores on a particular alienation index and whether a faculty person was either favorable vs. unfavorable to collective bargaining was the t-test. Scores on a particular index indicate the value of each independent variable (e.g., powerlessness, meaninglessness, etc.). The dependent variable in question 2 would be one of two dimensions — favorable vs. unfavorable to collective bargaining. With the use of t-tests the mean samples (favorable vs. unfavorable to collective bargaining) were compared on each of five indices to establish whether their means came from the same or different universes. A significance level of 5% was chosen as a standard for accepting or not accepting the individual null hypotheses.

Summary of Null Hypotheses and Results for Question 1

Since no specific purpose would be served by stating each null hypothesis generated by question 1 except redundancy, the following sentence will serve as a summary of all 9 independent variables and their association with each of the alienation indices.

There are no significant differences between the mean scores on the powerlessness, meaninglessness, normlessness, isolation and estrangement indices for faculty persons on the basis of: Age, Sex, Tenure, Rank, Income, Hours Teaching, Type of Activity, Number of Publications and Disciplines.

(Insert Table 1 here)

The results from this exploratory indicate that alienation is indeed associated with specific personal environmental variables in higher education. These results extend the previous findings of Lane (1967), Haehn (1969), Moore (1971), Lozier (1973) and Ladd and Lipset (1975). In the review it was reported that these researchers had linked opinion concerning collective bargaining with age, rank, tenure, salary, disciplines, etc. It is interesting to note in the results of the current research that these same independent variables are linked to specific types of alienation.

Younger faculty persons feel more powerlessness, meaninglessness, normlessness and estrangement in relation to their work. Untenured faculty persons feel more powerless, less meaning and more estranged from their work than their tenured colleagues. Faculty persons in the lower ranks feel that they have less power, less meaning, are more confused (normlessness) and are more estranged from the work situation than their higher ranking associates. Faculty persons from certain disciplines — the social sciences, humanities and nursing — felt that they had less power and their work was not as meaningful to them as their colleagues from other disciplines (particularly the natural sciences and medicine). Income was related only to the index of meaning — the lower a faculty person's income — the less meaningful their perception of work. Number of publications produced by a faculty person — the more confusing standards of work performance were perceived by that faculty person.

Two independent variables, hours teaching and type of activity were not related to any of the alienation indices. It should additionally be noted that none of independent variables were related to isolation. Thus, isolation appears to be an anomaly. This is probably due to Seeman's original definition of isolation. He defines isolation as a feeling of being above or superior to conventional culture. Isolation was the only concept that, by definition, could not be directly applied to the work situation since it was descriptive of the general culture. Future studies should discard isolation when they are attempting to analyze specific work situations.

Null Hypotheses and Results for Question 2

Question 2: Is there a relationship between the five dimensions of alienation suggested by Seeman (powerlessness, meaninglessness, normlessness, isolation and estrangement) and faculty members' opinions on the acceptability of collective bargaining.

Null Hypothesis #1: There are no significant differences between the mean scores of those faculty who favor collective bargaining vs. those faculty who oppose collective bargaining on the powerlessness index.

(Insert Table 2 here)

Significant effects were associated with favorableness vs. unfavorableness to collective bargaining on the powerlessness index (T - Value = 7.77, d.f. = 182, $p < 0.001$). Thus, Null Hypothesis #1 was rejected. Faculty

persons who favor collective bargaining score significantly higher on the powerlessness index than do faculty persons opposed to collective bargaining in higher education.

More specifically, faculty who favor collective bargaining feel (attitudinally) that they have significantly less ability to influence decisions concerning such issues as salary increases, promotion, tenure, etc., than do faculty persons opposed to collective bargaining.

Null Hypothesis #2: There are no significant differences between the mean scores of the faculty who favor collective bargaining vs. those faculty who oppose collective bargaining on the meaninglessness index.

(Insert Table 3 here)

Significant effects were associated with favorableness vs. unfavorableness to collective bargaining on the meaninglessness index (T - Value = 7.60, d.f. = 182, $p < 0.001$). Thus, Null Hypothesis #2 was rejected.

Faculty persons who favor collective bargaining score significantly higher on the meaninglessness index than do faculty persons opposed to collective bargaining in higher education.

More specifically, the former faculty persons feel that they have significantly fewer intrinsic rewards, effect on society, etc., than do faculty persons opposed to collective bargaining.

Null Hypothesis #3: There are no significant differences between the mean scores of the faculty who favor collective bargaining vs. faculty opposed to collective bargaining on the normlessness index.

(Insert Table 4 here)

Significant effects were associated with favorableness vs. unfavorableness to collective bargaining on the normlessness index (T - Value = 8.67, d.f. = 182,<p 0.001). Thus, Null Hypothesis #3 was rejected.

Faculty persons who favor collective bargaining score significantly higher on the normlessness index than do faculty persons opposed to collective bargaining in higher education.

More specifically, the former faculty persons feel that they are more confused over normative procedures such as, how salary increases, promotions, tenure, etc., are arrived at in their institution than are faculty persons opposed to collective bargaining.

Null Hypothesis #4: There are no significant differences between the mean scores of those faculty in favor of collective bargaining vs. those faculty opposed to collective bargaining on the isolation index.

(Insert Table 5 here)

Significant effects were associated with favorableness vs. unfavorableness to collective bargaining on the isolation index (T - Value = 5.92, d.f. = 182,<p 0.001). Thus, Null Hypothesis #4 was rejected.

Faculty persons who favor collective bargaining score significantly higher on the isolation index than do faculty persons opposed to collective bargaining in higher education.

More specifically, the former faculty feel they are more isolated in the sense of a lack of a "collegial community" than do faculty persons opposed to collective bargaining.

Null Hypothesis #5: There are no significant differences between the mean scores of those faculty in favor of collective bargaining vs. those faculty who oppose collective bargaining on the estrangement index.

(Insert Table 6 here)

Significant effects were associated with favorableness vs. unfavorableness to collective bargaining on the estrangement index (T - Value = 6.92, d.f. = 182, $<p$ 0.001). Thus, Null Hypothesis #5 was rejected.

Faculty persons who favor collective bargaining score significantly higher on the estrangement index than do faculty opposed to collective bargaining in higher education.

Based on the t-tests administered, faculty who are in favor of collective bargaining score significantly higher on all of the alienation indices than faculty opposed to collective bargaining. Therefore, it might logically be assumed that faculty in favor of collective bargaining are indeed more alienated in relation to their occupation than those faculty persons who oppose collective bargaining.

Discussion

This exploratory research indicates that certain professional and environmental characteristics (age, tenure, rank and discipline) are associated with various types of alienation (e.g., powerlessness, normlessness, etc.) expressed by faculty persons in higher education. The data further indicates that faculty alienation is also associated with faculty opinions concerning collective bargaining (favoring vs.

opposing). Thus, the current research extends the original findings of Lane (1967), Haehn (1969), Moore (1971), Opdahl (1971), Lozier (1973) and Ladd and Lipset (1975), which linked the above professional and environmental variables to opinions concerning collective bargaining. This research supports these findings and adds the concept of alienation as an attitude constellation that emerges out of work conditions, and predisposes the faculty person to favor or oppose collective bargaining as a means of resolving perceived negative work conditions. Thus, collective bargaining becomes the means to resolve personal and environmental conflicts (Coser, 1956) particular to the work situation. More specifically, collective bargaining becomes the means preferred by many faculty persons to redress feelings of powerlessness, normlessness, meaninglessness, isolation and estrangement produced by environmental conditions (work) in higher education. The fact that alienation (as measured by this research) was related to the higher education work situation supports the findings of other studies concerned with work alienation (see, for example, Clark, 1959; Pearlin, 1962; Neal and Seeman, 1964; Neal and Rettig, 1963; Srole, 1956).

1.(a) Discussion of Results for Question 1 — Question 1 dealt with the relationship between (9) independent (professional and environmental variables) variables and (5) dependent variables (scores on the alienation indices).

1. Age proved to be significantly related to four of the five indices of alienation. Ladd and Lipset's (1975) survey indicated that younger faculty persons were more in favor of collective bargaining than were older faculty persons. The current research supports this finding

and adds that younger faculty are also more likely to feel: less powerful; that there was less meaning in their work; less sure of normative procedures in their work and less a part of the academic community in which they work than their older colleagues

The only exception to these findings was isolation. It is the researcher's contention that this anomaly occurs because Seeman's conceptualization of isolation was more general (isolated from society) and, therefore, it could not be adequately operationalized to measure specific work alienation. Thus, isolation as operationalized in the questionnaire does not measure the same type of alienation (from society) as compared to the other four indices (from the work situation).

2. Sex proved to be significantly related to only one of the indices (meaninglessness). One might argue that the liberation movement has not significantly raised the consciousness level of female faculty persons in higher education concerning the facts of their inequality regarding tenure, rank and salary.*

How then does one answer the obtained difference on the meaningless index for women? This may be due to the fact that a large percentage (39%) of the female subjects in this sample were nurses. Perhaps these persons do not see as much meaning or significance in teaching at a university as they do in working at a hospital. Or it may be that nurses are presidposed to favor unions and bargaining because these organizations and processes are part of their profession. It is also possible that there are morale problems within the nursing faculty at this university related to differences concerning theoretical issues of nursing.

*See Ladd and Lipset's survey (1975) for specification of these inequalities.

3. Tenure proved to be significantly related to three indices (powerlessness, meaninglessness and estrangement). It might be argued that tenure represents acceptance, presitge, importance; security and, therefore, power for faculty persons in higher education.

The untenured faculty persons (especially if they are older) are less likely to feel that their occupations are significant than a tenured colleague. This might be viewed as a type of defensiveness on their part, denying dissatisfaction over not having been accepted as a tenured member of the academic community. This might be related to the findings of Wallin (1966), that the satisfaction with one's occupation is related to consistency in the reward structure. In other words, if you are hired by the institution to teach, but are rewarded (salary increases, promotion, tenure) on the basis of research and publications, there is much more likelihood of faculty dissatisfaction with work (lack of meaning).

The nontenured faculty person may also feel more apart (estranged) from the "academic community" at their institution. This might be related to age — they have had less time to become integrated into the institution, or it might be that their lack of tenure indicates that they have not yet met the institutional standards for full acceptance. In either case, estrangement (a feeling of separateness) may be the result. Again, tenure, as in Ladd and Lipset's (1975) study, was related to attitudes toward collective bargaining.

4. Rank was significantly related to four of the five alienation indices (powerlessness, normlessness, meaninglessness and estrangement).

The differences only became apparent and significant when the instructor rank was dropped from the comparison. The instructor rank was eliminated because faculty persons in this category proved to be a heterogeneous group (some were older, part time, partially retired). The current findings support the results of Ladd and Lipset (1975) that rank is related to attitude concerning collective bargaining. The current research extends these findings by indicating that there is also a relationship between rank and certain forms of alienation. Thus, an assistant professor is less likely to feel as powerful, as much meaning in his work, as much knowledge of procedure or as much a part of the institutional community as his higher ranking colleagues (associate and professor).

The only alienation variable not related to rank was isolation. The reason for the nonsignificant relationship was explained previously.

5. Income was significantly related to only one of the alienation indices (meaninglessness). Income, however, should not be eliminated from further consideration because it approached significance on the normlessness (0.08) and estrangement (0.06) indices. It is interesting to note that rank and tenure, or lack thereof, are more important factors in predicting faculty alienation than income.

It would seem if one's income is lower, that this then affects one's perception of the meaning or significance of one's occupation.

6. Variation in the number of hours teaching did not prove to be significantly related to any of the alienation indices. It would appear that the amount of time spent in the classroom had little to do with alienation since faculty persons who spent less time in the classroom did not

score higher on the alienation indices. This is an interesting finding since most faculty persons indicate that teaching is what they like best about their work as opposed to research or administration (Ladd and Lipset, 1975). Eckert, et al., (1969) reports that relationships or interaction with students in the classroom is one of the most rewarding aspects of a faculty person's career. Perhaps an alternative explanation for the nonsignificance of amount of time spent teaching is that any teaching time may be viewed by faculty persons as rewarding and meaningful.

7. The principle type of activity that the faculty person was engaged in (teaching, research, administration, teaching and research, or teaching and administration) was not significantly related to any of the alienation indices. The literature cited for the above explanation would again seem to indicate that these results represent a paradox. Apparently, however, this might mean that there exists sufficient occupational choice or flexibility in the academic area to accommodate the varying interests of the faculty persons involved. It would be interesting, in future research, to compare the scores of administrators with faculty persons on the indices to determine if there is any difference in alienation between the two.

8. The number of publications generated in the last two years was significantly related to normlessness and approached significance (0.051) on the estrangement indices. Faculty who publish less feel more alienated, i.e., normlessness and perhaps estrangement. This might be related to confusion in the reward structure (Wallin, 1966). If the faculty person

feels that the rewards offered are inconsistent with his major goals or the mission of the university, confusion (alienation) may result. Further, the lack of publications may enhance a feeling of separateness (estrangement) from one's colleagues and one's own discipline. It might prove beneficial in future research to reduce the number of publishing categories to three (no publications, 1-3 publications and more than 3 publications) in order to determine if significant relationships might not be obtained between publication and alienation on the other indices.

9. The discipline area of faculty persons was found to be significantly related to powerlessness and meaninglessness indices and approached significance on the normlessness index (0.09). One explanation for the discrepancies in alienation respective to discipline might be that, traditionally, liberalism has been more closely associated with the social sciences and humanity than with engineering, natural sciences and businesses. It may be that faculty persons in the more liberal disciplines would be less opposed to change (collective bargaining) or be more willing to try different modes for obtaining traditional rewards. These findings would seem to support Ladd and Lipset's (1975) study that faculty persons in the social sciences and humanities are more supportive of collective bargaining than their colleagues in business, natural sciences and engineering. It might also be that persons in the natural sciences at this particular institution have published more than their social science and humanities counterparts and, therefore, have received more rewards (power) and use the traditional modes (less norm confusion) for obtaining these rewards.

What the findings associated with Question 1 suggest is that feelings of alienation are related to a number of personal-environmental variables (e.g., age, tenure, rank, discipline, etc.) as well as attitudes toward collective bargaining (favoring vs. opposing). It would appear that variations in personal and environmental characteristics (e.g., rank, age, tenure, discipline, income, etc.) produce various types of alienation (e.g., meaninglessness, powerlessness, etc.) and that these forms of alienation predispose faculty persons to either favor or oppose collective bargaining.

1.(b) Discussion of Results for Question 2 — The results associated with Question 2 indicate that faculty favoring collective bargaining in higher education score higher on all of the alienation indices (powerlessness, meaninglessness, normlessness, isolation and estrangement). These findings support the results generated by other sociologists* who link work with alienation.

It seems logical to conclude that faculty persons who feel more powerless are also the faculty who are going to be more in favor of collective bargaining. This is one of the classic reasons associated with collective action on the part of workers to overcome powerlessness (see Karl Marx in Schacht, 1970). Faculty may view collective bargaining as a means to help them influence decisions concerning professional and work issues (rank, tenure, salaries, promotion, grievances and other conditions of employment.) The literature in higher education gives specific examples of real and potential power loss by faculties and faculty persons in higher education

*See the beginning of the discussion section for specific citations.

(see, for example, Pettibon, 1973; Magarrell, 1975; Dropkin, 1972; Magarrell, 1982; etc.). A basic problem concerns how to manage the conflict that has evolved during the last two decades over the question of power. Collective bargaining has become the option for many faculties (Birnbaum, 1980 and Angell, 1981).

It also seems logical to conclude that faculty persons who do not view their occupation as having much meaning or significance are more willing to accept collective bargaining as a means of changing this situation than would faculty persons opposed to collective bargaining (Angell, 1981).

A third conclusion concerning the findings of the current research is that faculty who manifest more confusion (normlessness) over institutional procedure are more likely to view collective bargaining as a means of clarifying this confusion than are faculty persons who do not manifest this confusion. In many articles concerned with higher education, governance emerged as a major problem specified by numerous faculty persons (see, for example, Olsen, 1974; Ladd and Lipset, 1976; Cheit, 1975; Birnbaum, 1980; Garbarino, 1975; Duryea and Fisk, 1972; Carr and Van Eyck, 1973 and Angell, 1981).

This study also reinforces a study done by Wallin (1966) which indicated that confusion in the reward structure does affect faculty attitudes and teaching effectiveness. Numerous accounts of institutions of higher education paying "lip service" to rewarding teaching effectiveness, when in fact the most lucrative rewards are received for publishing, were cited by Wallin (1966). Faculty in higher education may be opting for collective bargaining as a means of clarifying the muddled reward

structure prevalent at many institutions of higher education that do not have collective bargaining. As Birnbaum (1980) points out, this adversarial procedure is becoming more and more streamlined as the bargaining process matures.

A fourth conclusion that seems warranted on the basis of the results is that those faculty persons who feel more isolated from society-at-large are more in favor of collective bargaining. This may be viewed as a protective measure on the part of these isolated faculty persons. They might, for example, seek some protection from a society that is beginning to demand accountability on the part of faculties and institutions in higher education (see Hartritt, 1971; Lessinger, 1973 and Cheit, 1975). Ladd and Lipset's (1975) study reported faculty persons are indeed much more liberal on social, political and economic issues than most persons in society. Thus, the perception of isolation based on difference seems justified. This same survey also indicated that faculty persons felt they had very little power to influence major societal issues when compared to other professionals such as military, business, governmental and industrial leaders. Thus, there seems to be a felt difference between faculty on the one hand and the general public on the other. This might be considered as a possible explanation for the sense of faculty isolation.

A fifth conclusion which seems warranted on the basis of the results is that those faculty persons who feel the most separate or apart (estranged) from the academic community are more in favor of collective bargaining than faculty persons who do not feel as estranged. It might

be that faculty persons who score higher on estrangement feel that they receive less support from either their colleagues or from the administration. Collective bargaining is likely to be viewed by the estranged faculty person as a means of protecting their own self interests through an aggregate. This sense of estrangement has been discussed by several authors in the field of higher education, who have lamented the decline in what was traditionally referred to as the "community of scholars" (see, for example, Brown, 1965 and Caplow and McGee, 1958).

What the findings related to Question 2 indicate is that faculty opinion on collective bargaining is associated with alienation (attitudes of powerlessness, normlessness, meaninglessness, isolation and estrangement). These attitudes (see discussion of Question 1), in turn, are associated with professional and environmental conditions.

1.(c) Discussion of the Future of Collective Bargaining in Higher Education as it Relates to Alienation — At the present time, approximately 700 of 3,000 colleges and universities in the United States (23%) have collective bargaining processes at their campuses. This means that about 150,000 of the nation's 300,000 faculty persons are currently being represented by some form of bargaining agent (Angell, 1981).

An important issue to consider is whether this trend will continue or is abating. Several authors contend that the process will continue in the decade of the eighties (see, for example, Garbarino, 1975; Duryea and Fisk, 1973; Carr and Van Eyck, 1973; Birnbaum, 1980 and Angell, et al., 1981). Further, authors such as Birnbaum (1980) also contend that this trend, when

it becomes established and the kinks are worked out, will be highly beneficial to all parties involved — faculty, administration, students and society.

The national collective bargaining center, however, predicts a different trend will occur in the eighties. They report that there were only two newly-organized faculty bargaining units in 1981 and only eight first-time contracts were signed in 1981. Both of these figures represent all-time lows. The center also reported that faculty membership in unions was at an all-time high (157,324). With the addition of faculty members from the California State University system,* the center predicted that membership in faculty unions would be about 200,000 by the end of 1983 (Watkins, 1982). This apparently is viewed as the peak year for collective bargaining in higher education.

Among others, Kenneth P. Mortimer reported at a national conference on education this year that the trend in faculty unionization was about to slow down and perhaps stop (especially at public colleges). The primary reason given for the reversal was that states which, to date, have not passed enabling legislation making collective bargaining legal for faculty persons employed by the state, do not appear likely to do so. Currently, there are 26 states which do not have laws authorizing faculty members on public campuses to bargain collectively (Watkins, 1982).

Denial of the right to bargain collectively (by refusing to pass enabling legislation) does not seem, in this researcher's perspective, to be a realistic means to resolve conflicts inherent in higher education (Collins, 1975). In fact, this may even increase the alienation,

*The California State University system has recently opted for collective bargaining.

especially the feelings of powerlessness and estrangement. Faculty persons are likely to feel frustrated by their inability (lack of power) to redress perceived grievances in the work situation, where enabling legislation is absent.

It would seem unrealistic to assume that the problems associated with higher education, such as budget cuts (Magarrell, 1981), faculty layoffs (Jacobson, 1982), reduced student numbers (Rudd, 1979), the federal attitude toward higher education plus the traditional concerns over salary, promotion and tenure are not simply going to disappear. If these problems are not addressed, it seems likely that they will continue to feed faculty alienation.

The current research indicates that faculty person's professional and environmental (work) characteristics are associated with an attitude of alienation. These attitudes, in turn, are associated with opinions — favoring or opposing collective bargaining.

In those states where institutions of higher education are denied collective bargaining, it would seem imperative that faculties and administrations find some means to deal with work conditions that contribute to alienation. How might feelings of faculty powerlessness, normlessness, meaninglessness, isolation and estrangement be reduced where collective bargaining is not a viable alternative?

This exploratory research suggests some interesting questions for future research. For example:

(1) Are the findings from this exploratory research generalizable to the entire faculty in higher education?

(2) Does unionization of faculty persons actually reduce their alienation?

(3) Is faculty mobility, quality of students at an institution, quality of the institution, etc., related to faculty alienation?

(4) Are there other processes available to redress faculty alienation besides collective bargaining?

These examples are suggested to indicate the utility of exploring alienation as a potential source for explaining several problems in higher education. The theoretical utility of alienation would seem appropriate to understanding current problems in higher education based on the results of this exploratory research.

Bibliography

Aiken, M., and J. Hage. "Organizational Alienation: A Comparative Analysis," American Sociological Review, Vol. 31, No. 4, 1966, pp. 497-507.

Angell, G. W. Faculty and Teacher Bargaining: The Impact of Unions on Education, Lexington Books, 1981.

Birnbaum, R. Creative Academic Bargaining: Managing Conflict in the Unionized College and University, (New York and London: Teacher's College Press, 1980).

Bolton, C. D. "Alienation and Action: A Study of Peace Group Members," American Journal of Sociology, Vol. 78, No. 3, Nov. 1972, pp. 537-561.

Brown, D. G. The Market for College Teachers, (Chapel Hill, University of North Carolina Press, 1965).

Bruvold, H. W., and L. S. Wrightsman. Social Psychology in the Seventies, (Calif.: Brooks/Cole Publishing Co., 1972).

Bullough, B. "Alienation in the Ghetto," American Journal of Sociology, Vol. 72, No. 5, March 1967, pp. 469-478.

Caplow, T., and R. McGee. The Academic Market Place, (New York: Basic Books, 1958).

Carr, L. "The Srole Scale of Acquiescence," American Sociological Review, Vol. 36, No. 2, April 1971.

Carr, R. K., and D. K. Van Eyck. Collective Bargaining Comes to the Campus, (Washington, D.C.: The American Council on Education, 1973).

Cheit, E. F. "What Price Accountability," Change, Vol. 7, No. 9, Nov. 1975, pp. 30-34 and 60-61.

Clark, J. P. "Measuring Alienation Within a Social System," American Sociological Review, Vol. 24, No. 6, 1959, p. 894.

Collins, R. Conflict Sociology, Academic Press, 1975.

Coser, L. A. The Functions of Social Conflict, (New York: Free Press, 1956).

Coser, L. A. The Functions of Conflict, (New York: Free Press, 1964).

Dean, D. G. "Alienation: Its Meaning and Measurement," American Sociological Review, Vol. 24, No. 6, 1959, pp. 753-758.

Dropkin, S. "Accountability: Weapon or Tool," Educational Technology, Vol. 15, Oct. 1972.

Durkheim, E. Suicide: A Study in Sociology, (translated by J. A. Spaulding and G. Simpson), (New York: Free Press, 1951).

Duryea, E. D. Faculty Unions and Collective Bargaining (Robert S. Fisk Associates), Jossey-Bass Publishers, 1973.

Eckert, R. E., J. E. Starklein, and H. B. Sagen. "College Faculty Members View Their Job," AAUP Bulletin, XL, Winter 1969.

Etzioni, A. "Basic Human Needs, Alienation and Inauthenticity," American Journal of Sociology, Vol. 33, No. 6, 1968, pp. 870-885.

Fischer, C. S. "On Urban Alienation and Anomie: Powerlessness and Social Isolation," American Sociological Review, Vol. 38, No. 3, 1973, pp. 311-326.

Form, W. H. "The Social Construction of Anomie: A Four Nation Study of Industrial Workers," American Journal of Sociology, Vol. 80, No. 5, March 1975, p. 1163.

Gaff, J. and R. C. Wilson. The Teaching Environment, (Berkeley Center for Research and Development in Higher Education, University of California, 1971).

Gailbraith, J. K. The Affluent Society, (Boston: Houghton Mifflin Co., 1967).

Garbarino, J. W. Faculty Bargaining: Change and Conflict, McGraw-Hill Book Company, 1975.

Gould, L. J. "Conformity and Marginality: Two Faces of Alienation," Journal of Social Issues, Vol. 25, No. 3, 1969.

Haehn, J. O. "A Study of Trade Unionism Among College Professors," (Doctoral dissertation, University of California, Berkeley, 1969).

Hajda, J. "Alienation and Integration of Student Intellectuals," American Sociological Review, Vol. 26, No. 5, 1961, pp. 758-777.

Hammond, G. B. Man in Estrangement, (Nashville, Tenn.: Vanderbilt University Press, 1965).

Hartritt, T. "Accountability in Higher Education," Educational Technology, 1971.

House, J. A., and W. M. Mason. "Political Alienation in America," American Sociological Review, Vol. 40, No. 2, April 1975, pp. 123-147.

Jacobson, R. L. "AAUP Challenges Claim that Faculty Layoffs Need Not be Based Mainly on 'Exigency,'" The Chronicle of Higher Education, March 31, 1982, Vol. XXIV, No. 5, pp. 1 & 6.

Jones, H. The Gnostic Religion: The Message of the Alien God and the Beginning of Christianity, (Second edition, revised), (Boston: Beacon Press, 1963).

Kaplan, A. The Conduct of Inquiry: Methodology for the Behavioral Science, Chandler Publishing Company, 1964.

Kenniston, K. "What's Bugging the Students," Educational Record, Vol. 5, No. 12, Spring 1970.

Kerlinger, F. N. Foundations of Behavioral Research (2nd edition), (New York: Holt, Rhinehart & Winston, Inc., 1973).

Kornhouser, W. The Politics of Mass Society, (Glencoe, Ill.: Free Press, 1959).

Ladd, E. C., Jr., and S. M. Lipset. A series of articles in The Chronicle of Higher Education, from September 15, 1975 to May 31, 1976.

Laing, R. D. The Politics of Experience, (New York: Pantheon Books, 1967).

Lane, R. E. "Faculty Unionism in a California State College — A Comparative Analysis of Union Members and Non-Union Members," (Doctoral dissertation, University of Iowa, 1967).

Lessinger, L. M. "Accountability in Public Education," Today's Education, Vol. 59, May 1970, p. 52.

Lozier, G. G. "Voting Patterns of Pennsylvania State College Faculty in Collective Negotiations Election," (Doctoral dissertation, The Pennsylvania State University, 1973).

Lozier, G. G., and K. P. Mortimer. Anatomy of a Collective Bargaining Election in Pennsylvania's State Owned Colleges, (The Pennsylvania State University, University Park, Pa.: Center for the Study of Higher Education, Feb. 1974).

Macquarrie, J. "A Theology of Alienation" in Alienation: Concept, Term and Meaning by F. Johnson (ed.), (New York: Seminar Press, 1973).

Magarrell, J. "Budget Cuts in Some States Arouse Fears of New Layoffs of Professors," The Chronicle of Higher Education, Sept. 30, Vol. XXIII, No. 5, 1981, pp. 1 & 10.

Magarrell, J. "They're Putting Lids on Enrollments," The Chronicle of Higher Education, Vol. XI, No. 8, Nov. 3, 1975, p. 1.

McDill, E. L.,and J. C. Ridley. "Status Anomia, Political Alienation and Political Participation," American Journal of Sociology, Vol. 68, No. 2, 1962, pp. 205-213.

Meszaros, I. Marx's Theory of Alienation, (London: The Free Press of Glencoe, 1957).

Middelton, R. "Alienation, Race and Education," American Sociological Review, Vol. 28, No. 6, 1963, pp. 937-977.

Moore, J. W. Attitudes Toward Collective Negotiations: Pennsylvania Community College Faculty, (University Park, Pa.: Center for the Study of Higher Education, 1971).

Neal, A. G., and S. Rettig. "Dimensions of Alienation Among Manual and Non-Manual Workers," American Sociological Review, Vol. 28, No. 4, 1963, pp. 599-603.

Neal, A. G., and M. Seeman. "Organizations and Powerlessness: A Test of the Mediation Hypothesis," American Sociological Review, Vol. 29, No. 2, 1964, pp. 216-226.

Nisbet, R. The Quest for Community, (New York: Oxford University Press, 1953).

Olsen, J. K. "Governance by Confrontation: Adversarialism at the University," Intellect, Vol. 102, No. 2356, March 1974.

Opdahl, R. W. "Faculty Participation in Academic Decision Making" in "Emerging" State Colleges, (Williamsport, Pa.: Economic Research Associates, 1971).

Pearlin, L. P. "Alienation From Work," American Sociological Review, Vol. 28, No. 6, 1963, pp. 937-977.

Pettibon, W. G. Collective Bargaining in Higher Education, Pennsylvania State Education Association, 1973.

Ransford, H. E. "Isolation, Powerlessness and Violence: A Study of Attitudes and Participation in the Watts Riot," American Journal of Sociology, Vol. 73, No. 5, 1968, pp. 581-591.

Rudd, E. "The Foresight Saga: Predicting Future Numbers of Students," Higher Education, Vol. 8, Jan. 1979, pp. 89-98.

Seeman, M. "On the Meaning of Alienation," American Sociological Review, Vol. 24, No. 6, 1959, pp. 783-790.

Schacht, R. Alienation, (New York: Doubleday and Co., 1970).

Schwartz, D. C. Political Alienation and Political Behavior, (Chicago: Aldine Press, 1973)

Simpson, M. E. "Social Mobility, Normlessness and Powerlessness in Two Cultural Contexts," American Sociological Review, Vol. 35, No. 5, 1970, pp. 1002-1013.

Srole, L. "Anomie, Authoritarianism and Prejudice," American Journal of Sociology, Vol. 62, July 1956.

Tillich, P. "Estrangement and Reconciliation in Modern Thought," Review of Religion, Vol. IX, Nov. 1944.

Urdang, L. (editor-in-chief), The Random House Dictionary of English Language, (New York: Random House, 1968).

Wallin, H. A. "Faculty In-Put: A Function of the Colleges Incentive System" in Research on Academic In-Put, (edited by the Forum of the Association for Instructional Research, 1966, C. H. Bogley).

Watkins, B. T. "A New Academic Disease: Faculty 'Burnout,'" The Chronicle of Higher Education, March 24, 1982, Vol. XXIV, No. 4, pp. 1 & 8.

Weisskopf, W. A. Alienation and Economics, (New York: E. P. Hulton and Co., Inc., 1971).

Zeitlan, M. "Alienation and Revolution," Social Forces, Vol. 45, No. 3, Dec. 1966.

Zurcher, L. A., Jr., A. Meadow, and S. E. Zurcher. "Value Orientation, Role Conflict and Alienation From Work: A Cross-Cultural Study" in Alienation and the Social System, (ed. by A. W. Finifiter), (New York: John Wiley and Son, Inc., 1972).

Table 1

Summary of the Relationship Between the Alienation Indices and the Independent Variable

Independent Variables	Powerlessness	Meaninglessness	Normlessness	Isolation	Estrangement
Age	*+	+	+	-	+
Sex	-	+	-	-	-
Tenure	+	+	-	-	+
Rank	+	+	+	-	+
Income	-	+	-	-	-
Hours Teaching	-	-	-	-	-
Type of Activity	-	-	-	-	-
Number of Publications	-	-	+	-	-
Discipline	+	+	-	-	-

* + = Significant at the 0.05 level

- = Not significant at the 0.05 level

Table 2

Means and Standard Deviations for Faculty in Favor of Collective Bargaining vs. Faculty Opposed to Collective Bargaining on the Powerlessness Index

	# of Cases	Means	Standard Deviation
Favorable to Collective Bargaining	71 (39%)	20.8451	3.875
Unfavorable to Collective Bargaining	113 (61%)	16.5752	3.466
Total	184 (100%)		

Table 3

Means and Standard Deviations for Faculty in Favor of Collective Bargaining vs. Faculty Opposed to Collective Bargaining on the Meaninglessness Index

	# of Cases	Means	Standard Deviation
Favorable to Collective Bargaining	71 (39%)	18.1408	4.270
Unfavorable to Collective Bargaining	113 (69%)	13.3540	4.084
Total	184 (100%)		

Table 4

Means and Standard Deviations for Faculty in Favor of Collective Bargaining on the Normlessness Index

	# of Cases	Means	Standard Deviation
Favorable to Collective Bargaining	71 (39%)	22.6620	3.410
Unfavorable to Collective Bargaining	113 (61%)	17.4690	4.257
Total	184 (100%)		

Table 5

Means and Standard Deviations for Faculty in Favor of Collective Bargaining vs. Faculty Opposed to Collective Bargaining on the Isolations Index

	# of Cases	Means	Standard Deviation
Favorable to Collective Bargaining	71 (39%)	18.5915	2.729
Unfavorable to Collective Bargaining	113 (61%)	16.0088	2.969
Total	184 (100%)		

Table 6

Means and Standard Deviations for Faculty in Favor of Collective Bargaining vs. Faculty Opposed to Collective Bargaining on the Estrangement Index

	# of Cases	Means	Standard Deviation
Favorable to Collective Bargaining	71 (39%)	19.4507	3.824
Unfavorable to Collective Bargaining	113 (61%)	15.1150	4.325
Total	184 (100%)		